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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,802	10/30/2003	Koyata Takahashi	Q78274	6874

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EXAMINER	
WATKINS III, WILLIAM P	

ART UNIT	PAPER NUMBER
1772	

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/695,802	TAKAHASHI ET AL.	
	Examiner	Art Unit	
	William P. Watkins III	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 March 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-5,7-13,18-20 and 23-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-5, 7-13, 18-20 and 23-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☒ Other: *See Continuation Sheet*.

Continuation of Attachment(s) 6). Other: Thomson Translation of JP-A 11-106225.

DETAILED ACTION

1. The rejections in sections 7, 9, 12, 14 and 16 of the detailed portion of the office action mailed 19 October 2005 are withdrawn in view of applicant incorporating the limitations of claims 21 and 23 into the independent claims.

2. Claim 26 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

It is not clear where new claim 26 is supported in the specification.

3. Claim 26 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear how the film of claim 26 that is claimed as being smooth and with out voids is consistent with the island projections of claim 3, that do not overlap and expose the surface of the substrate.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1, 3-5, 7-13 and 18-20, 22, 24-26 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7, 10-15 of copending Application No. 10/964,893. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are broader than the more specific claims of the '893 application and thus obvious over them. The porosity of the '893 claims would have appeared to be inherent in the embodiments of the instant specification that support the instant claims to one of ordinary skill in the art and thus the claims of the '893 application would have been obvious to one of ordinary skill in the art over the instant claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claims 1, 3-5, 7-13 and 18-20, 22, 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. (U.S. 5,324,566).

Ogawa et al. teaches a substrate, which may be glass, that is coated with glass particles that produce various rounded

surfaces that have diameters in the micron range (abstract, col. 11, lines 30-40, col. 13, lines 30-35, col. 16, lines 55-65, Figures 34, 35, 36, 28-31). The surfaces are shown as rounded in the Figures. The instant invention claims rounded glass particles on a substrate forming island projections with a loading of 20 to 5,000 mm square. It would have been obvious to one of ordinary skill in the art to have used a particle loading in the instant claimed range as Ogawa et al. show separated particles in the micron range. The examiner takes micron sized particles separated on a substrate as producing the instant claimed particle range. Regarding claims 7-9 and 18-20 it is unclear what additional structure is added to the body of the claims by the preamble language of "film-forming device, plasma-etching device and plasma-cleaning device".

8. Claims 1, 3-5, 7-13 and 18-20, 22, 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (U.S. 6,777,045 B2 in view of Kyoichi Inaki et al. (JP-A 11-106,225, Thomson translation).

Lin et al. teaches a surface of a wall of a chamber of a plasma device that is plasma sprayed with micron size particles on a roughened surface to form a surface that has good adherence

to films deposited when the chamber is in use (abstract). The particles may be initially formed in the form of projections (Figure 3B). Kyoichi Inaki et al. teaches the formation of a glass surface with spherical and oval glass projections that have a excellent adhesion to deposited CVD films. It would have been obvious to one of ordinary skill in the art to deposit glass particles in the shape of rounded projections on the chamber surface of Lin et al. in order to form rounded projections with good adhesion because of the teachings of Kyoichi Inaki et al.

9. Applicant's arguments filed 20 March 2006 have been fully considered but they are not persuasive.

Regarding the rejection using Ogawa et al., applicant argues that Ogawa et al. calls for a formation of a water repellant film. There is nothing in the instant claim language, which would exclude such a structure, as long as the separate island part limitations are met. Regarding the rejection of Lin et al. in view of Kyoichi Inaki et al., applicant argues that Lin et al. only teaches a film and not island particles and that section 0011 of JP-A 11-106225 teaches away from convex shapes. While the examiner agrees that the taught final product of

Kyoichi Inaki et al. is clearly a continuous film. The figures clearly show that the technology is capable of forming rounded projections if there is motivation to do so. Kyoichi Inaki et al. provide this motivation. Section 0011 of JP-A 11-106225 teaches conditions to avoid in order to accomplish the stated objective of convex and concave structures. Regarding the thermal spray articles attached to the amendment, both clearly show that it is possible to deposit discrete splats, which form island parts, if there is motivation to do so.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Watkins III whose telephone number is 571-272-1503. The examiner works an increased flex time schedule, but can normally be reached Monday through Friday, 11:30 A.M. through 8:00 P.M. Eastern Time. The examiner returns all calls within one business day unless an extended absence is noted on his voice mail greeting.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR of Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

William P. Watkins III
PRIMARY EXAMINER

WW/ww
May 29, 2006